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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,174

09/21/2005

Frank J. Baresich

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DUANE MORRIS, LLP
IP DEPARTMENT
30 SOUTH 17TH STREET
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EXAMINER

HEITBRINK, JILL LYNNE

ART UNIT

PAPER NUMBER

1732

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/550,174

Applicant(s)

BARESICH ET AL.

Examiner

Jill L. Heitbrink

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not provided any evidence that the corrected equation, submitted in the amendment filed September 21, 2005, is known to a person of ordinary skill in the art.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-10 and 12-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 1, line 19 "positing" is unclear as to its meaning. Is this meant to be "positioning".
6. Claims 2 and 12 should not refer to information on the internet and in literature for a definition of terms since the meaning may change. The terms should be clearly

defined as to their meaning in the specification. Claims 2 and 12 should be one sentence.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 11-13 and 16-24 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by BARESICH (U.S. Pat. 6,276,656).

9. As to claim 1, BARESICH discloses a process of providing a cavity controllable to a predetermined pre-injection temperature that is lower than a temperature at which the molding material sets (col. 5, lines 46-48), the mold cavity can be heated temporarily by injection of molten molding material at an injection temperature that is higher than the temperature at which the molding material sets (col. 5, lines 48-51), and the material thereafter cools by transfer of heat energy into the cavity to a post-injection temperature cool enough to harden the molding material (col. 6, lines 4-6). BARESICH discloses providing a mold cavity in the shape of the molded article (col. 5, lines 22-24) which is determine a material flow path in the mold cavity between a point of injection of the molten molding material and a remote part of the mold cavity to be filled with the molten material by flow from the point of injection. BARESICH discloses positing a pre-

Art Unit: 1732

injection temperature of the cavity (col. 5, line 46 and col. 9, lines 12-30) and an injection temperature of the molten material (col. 9, lines 37-39). BARESICH discloses mathematically determining a thickness of a thermal insulation temperature booster (col. 9, lines 61-65) at least along a part of the mold cavity along the flow path, such that a temperature of the molding material is elevated to an extent that the molding material remains at a temperature higher than the temperature at which the molding material sets, until the molding material has filled the mold cavity to form a molded article. As to claim 11, BARESICH (col. 7, lines 27-31) discloses the thermally insulating temperature booster having a material with a mathematical product of thermal conductivity, density and specific heat equal to no more than that specified in claim 11. As to claim 12, the thermally insulating temperature booster of BARESICH meets the limitations of the equations when using the molding conditions provided in the example of BARESICH. As to claim 13, the elevate a temperature of the mold cavity at the temperature boosters to a temperature at least 10 degrees C above setting temperature of the molding material is a process which the apparatus of BARESICH is capable by changing the injection temperature of the molten material and the pre-injection temperature of the cavity.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 8, 9, 14, and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over BARESICH (U.S. Pat. 6,276,656 in view of MAUS (U.S. Pat. 6,290,882).

12. BARESICH discloses the adapting of the mold and methods with a combination of injection molding and compression molding. MAUS teaches the injection compression molding and coining operations known in the molding of thin articles. It would have been obvious to a person of ordinary skill in the art that the combination of the injection molding and compression molding with the method of BARESICH would have including the known injection compression and coining operations.

13. Claims 2-6 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over BARESICH (U.S. Pat. 6,276,656.

14. Applicant states in the amendment filed September 21, 2005 that the equation for calculation of transient heat flow and the complementary error function are known relationships to a person of ordinary skill in the art. It would have been obvious to a person of ordinary skill in the art to combine these known relationships to the process and apparatus of Baresich so as to provide the desired thermal insulation temperature booster thickness. Claim 13 does not provide any structure to the apparatus, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Allowable Subject Matter

15. Claims 7 and 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

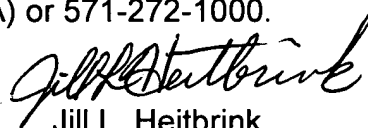
16. The prior art does not inject the molten molding material so as to elevate a temperature of the mold cavity at the temperature boosters to a temperature at least 10 degrees C above setting temperature of the molding material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill L. Heitbrink whose telephone number is (571) 272-1199. The examiner can normally be reached on Monday-Friday 9 am -2 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jill L. Heitbrink
Primary Examiner
Art Unit 1732

jlh